**Molarity Problems Worksheet**

**M = \_n\_** - n= # moles  **M= mol**

**V**  - V must be in liters (if in mL you must change to L) **L**

- Use M or mol/L as unit for molarity

1. What is the molarity of a 0.30 liter solution containing 0.50 moles of NaCl?

1. Calculate the molarity of 0.289 moles of FeCl3 dissolved in 120 ml of solution?

1. If a 0.075 liter solution contains 0.0877 moles of CuCO4, what is the molarity?

1. How many moles of NaCl are present in 600. ml a 1.55 M NaCl solution?

1. How many moles of H2SO4 are present in 1.63 liters of a 0.954 M solution?

1. How many liters of solution are needed to make a 1.66 M solution containing 2.11 moles of KMnO4?

1. What volume of a 0.25 M solution can be made using 0.55 moles of Ca(OH)2?

**For all of the problems below you will need to do a mole-mass conversion. Each problem will involve two steps.**

1. What is the molarity in 650. ml of solution containing 63 grams of NaCl?

1. How many grams of Ca(OH)2 are needed to produce 500. ml of 1.66 M Ca(OH)2 solution?

1. What volume of a 0.88 M solution can be made using 130. grams of FeCl2?